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REMARKS

Claims 1-3, 7-19 and 26-30 are pending. Claims 1, 11 and 26 are independent.

Applicant amended independent claim 1 to clarify that that establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol. Support for this clarification is found, for example, in FIG. 3, and at page 7, line 12 to page 8, line 20 of the originally filed application. Applicant similarly amended independent claims 11 and 26, and further amended independent claim 26 to correct an antecedent basis problem.

In addition, applicant added new claims 31-32, 35-36 and 37-38, which depend respectively from claims 1, 11 and 26, to describe examples of transport layer protocols and proxy network protocols that are used, in some embodiments, to establish the first session from the source computer system to the forward/relay service. Support for the subject matter described in the added claim is found, for example, at page 6, lines 4-17, page 7, lines 12-18, and at page 8, lines 10-22 of the originally filed application. Applicant also added new claims 33-34, which depend from claim 1, that describe embodiments of establishing a second session between the forward/relay service and the destination computer. Support for the subject matter described in the added claims is found, for example, in FIG. 4, at page 8, line 10, to page 9, line 9, and at page 15, line 8, to page 16, line 10.

The examiner rejected claims 1-3, 7-9 and 10-19 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,754,707 to Richards et al., in view of U.S. Patent No. 6,421,732 to Alkhatib et al., and in view of U.S. Patent No. 5,564,070 to Want et al. In addition, the examiner rejected claims 26-30 35 U.S.C. §103(a) as being unpatentable over Richards, in view of Alkhatib, in view of Want, and in view of U.S. Patent No. 6,185,606 to Bereiter.

Applicant's amended independent claim 1 recites "establishing a first session between the source computer system and a forwarder/relay service, wherein establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol." Specifically, as explained in the originally filed application:

In addition, the S/FT layer 43 establishes a firewall traversing session, or tunneling session, that allows data communication between the source endpoint 5 and the IP forwarder/relay service 15. The S/FT layer 43 automatically determines the appropriate proxied protocol, such as HTTP,

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**FTP or SOCKS4/5, to use to tunnel application data through a firewall,
(page 7, lines 12-18 of the originally filed application)**

Thus, applicant's method enables application data formatted, for example, in TCP/IP format, to be sent to the forward/relay service through the firewall using a proxy protocol, such as HTTP. The forward/relay service subsequently establishes a second session with the destination computer system, and thereby communicate the data it received from the source computer system to the destination.

In contrast, none of the references cited by the examiner describes the feature of "establishing a first session between the source computer system and a forwarder/relay service, wherein establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol."

Specifically, Richards describes a secure computer system that includes a central computer (referred to as a "nexus") that facilitates communication between two or more client software programs across wide area networks, including the Internet, where they would normally not be able to communicate with each other (col. 4, lines 55-62). To enable communication between two such client programs, the system uses a communication link called an upspout, which is a communication link from one of the software clients to the nexus through which the client can send information, and downspouts which are communication links from the nexus to the clients through which the nexus sends information (including data, as well as statistical and control information) to the clients (col. 5, lines 11-30). For example, as Richards explains:

To communicate with the client 130, the client 120 sends an upspout 126 through its send communication module 124. The information relayed through the upspout 126 is handled by the nexus incoming communications module 114. The incoming communication module 114 in turn relays the message transmitted by the client 120 through the downspout 128. (FIG. 1, and col. 5, lines 24-30)

Although Richards does not provide a lot of detail regarding the intricacies of how data is transmitted and/or received by the clients and the nexus, Richards indicates that:

The nexus 110 also supports secure communication using the Secure Socket Layer (SSL) protocol, which is an industry standard protocol, and other suitable encryption processes.

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The SSL security protocol provides data encryption, server authentication, message integrity, and optional client authentication for a TCP/IP connection. (col. 5, lines 48-54)

However, at no point does Richards describe that the either the upspout or downspout links established to and from at least one of the clients to the nexus use a proxy protocol, such as HTTP, to tunnel, for example, TCP/IP data through a connectivity barrier. Accordingly, Richards neither discloses nor suggests at least "establishing a first session between the source computer system and a forwarder/relay service, wherein establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol," as required by applicant's independent claim 1.

Alkhatib describes an IPNet Gateway that maps multiple servers on a private IP network to a single IP address on the Internet. The servers are then referenced uniquely using their Internet domain names (col. 1, lines 26-30). However, nowhere does Alkhatib describe using an intermediary system, such as a forward/relay service, to enable communication between a source computer and a destination computer that otherwise cannot communicate directly with each other. Accordingly, Alkhatib also does not describe a communication link between a computer and such an intermediary system, and certainly not one that transmits and receives transport layer protocol formatted data using a proxy network protocol. Thus, Alkhatib neither discloses nor suggests at least "establishing a first session between the source computer system and a forwarder/relay service, wherein establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol," as required by applicant's independent claim 1.

Want describes a system for maintaining processing continuity in a network having a network accessible application and an intermittently connected wireless system (Abstract). Particularly, as seen in FIG. 3, and as described in col. 4, line 63 to col. 5, line 4:

Each mobile computer in the workplace environment is assigned at least one agent. The agent operates primarily for the benefit of its assigned computer. For example, agents are responsible for "knowing" the location of their assigned computers. All communications routed to and from a mobile computer goes through its agent. As the mobile computers in the

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present invention run applications on remote hosts, all communications between the mobile computer and its applications are mediated by its agent.

While Want describes that data communicated from the mobile units to their agents include packets (see, for example, cols. 9 and 10), and that such communications may be based on User Datagram Protocol (see col. 10, lines 5-7), nowhere does Want describe that any communication link established in its system uses a protocol proxy, such as HTTP, to communicate data formatted using a transport layer protocol (such as UDP or TCP/IP). Thus, Want does not disclose or suggest at least "establishing a first session between the source computer system and a forwarder/relay service, wherein establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol," as required by applicant's independent claim 1.

Since none of the references cited by the examiner discloses or suggests, alone or in combination, at least "establishing a first session between the source computer system and a forwarder/relay service, wherein establishing the first session includes communicating transport layer protocol formatted data using a proxy network protocol," applicant's independent claim 1 is therefore patentable over the cited art.

Claims 2-3 and 7-10, as well as new claims 31-34, depend from independent claim 1. Accordingly, claims 2-3, 7-10 and 31-34 are patentable over the cited art for at least the same reasons as independent claim 1.

Independent claim 11 recites "establishing a session between the source computer system located behind a first connectivity barrier and a forwarder/relay service, wherein establishing the session includes communicating transport layer protocol formatted data using a proxy network protocol." Accordingly, for reasons similar to those provided with respect to independent claim 1, at least this feature is not disclosed by the cited art. Applicant's independent claim 1 is therefore patentable over the cited art. Claims 12-19, as well as new claims 35-36, depend from independent claim 11 and are therefore patentable for at least the same reasons as independent claim 11.

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As noted above, the examiner rejected claim 26 under 35 U.S.C. §103(a) as being unpatentable over Richards, in view of Alkhatib, in view of Want, and in view of Bereiter.

Applicant's independent claim 26 recites "assign a server to handle a first session between the first computer system and a forwarder/relay service, wherein the first session communicates transport layer protocol formatted data using a proxy network protocol."

Bereiter describes an adaptive messaging system to enable machines separated by firewalls and poorly connected networks to communicate effectively (col. 1, lines 31-35). Particularly, two endpoint machines, such as machines 30 and 32 shown in FIG. 2, attempt to establish point-to-point connection between them. If the two machine cannot establish a direct point-to-point connection, the message that is to be sent from one machine to the other is encapsulated inside an e-mail attachment and sent to the destination machine via e-mail using the e-mail subsystem 36 (FIG. 2, col. 3, line 62, to col. 4, line 8, and col. 5, lines 4-28). But nowhere does Bereiter describe that an endpoint machine establishes a session with an intermediary system such as applicant's forward/relay service. Furthermore, Bereiter also does not disclose that any established communication link (let alone a communication link between an endpoint machine and an intermediary system) includes communicating transport layer protocol formatted data, such as TCP/IP formatted data, using a proxy protocol (such as HTTP). Thus, Bereiter does not disclose or suggest at least "assign a server to handle a first session between the first computer system and a forwarder/relay service, wherein the first session communicates transport layer protocol formatted data using a proxy network protocol," as required by applicant's independent claim 26.

As discussed above with respect to independent claim 1, none of Richards, Alkhatib and Want discloses or suggest at least "wherein the first session communicates transport layer protocol formatted data using a proxy network protocol."

Since none of the references cited by the examiner discloses or suggests, alone or in combination, at least "wherein the first session communicates transport layer protocol formatted data using a proxy network protocol," applicant's independent claim 26 is therefore patentable over the cited art.

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Claims 27-30, as well as new claims 37-38, depend from independent claim 26 and are therefore patentable for at least the same reasons as independent claim 26.

It is believed that all the rejections and/or objections raised by the examiner have been addressed.

All of the dependent claims are patentable for at least the reasons for which the claims on which they depend are patentable.


Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

No fees are believed due. Please apply any other charges or credits to deposit account 06-1050, referencing attorney docket 10559-227001.

Respectfully submitted,

Date: March 14, 2006


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